

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2004/014444

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C08G61/12 H01G9/00 H01M10/40

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C08G H01G H01M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 568 483 A (KOEHLER GERNOT ET AL) 4 February 1986 (1986-02-04) claims; examples 5,7,8 -----	1-22
Y	US 5 306 443 A (MATSUMOTO HITOSHI ET AL) 26 April 1994 (1994-04-26) column 19, lines 52-59; examples 54-63 -----	1-22
X	US 4 769 430 A (NAITOH SHIGEKI) 6 September 1988 (1988-09-06) claims; examples -----	1-22
X	EP 0 340 826 A (PHILIPS NV) 8 November 1989 (1989-11-08) page 4, lines 10-27 page 8, line 25 -----	1-11
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

14 December 2004

Date of mailing of the international search report

08.04.2005

Name and mailing address of the ISA

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# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/JP2004/014444

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 093 033 A (WEGENER PETER ET AL) 3 March 1992 (1992-03-03) claims; example 19 -----	1-11
X	JP 02 098915 A (SHOWA DENKO KK) 11 April 1990 (1990-04-11) cited in the application the whole document & PATENT ABSTRACTS OF JAPAN vol. 0143, no. 08 (E-0947), 3 July 1990 (1990-07-03) & JP 02 098915 A (SHOWA DENKO KK), 11 April 1990 (1990-04-11) abstract -----	1-11
X	JP 11 292957 A (CANON INC) 26 October 1999 (1999-10-26) the whole document & PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01, 31 January 2000 (2000-01-31) & JP 11 292957 A (CANON INC), 26 October 1999 (1999-10-26) abstract -----	1-22
Y	US 4 959 430 A (HEINZE JUERGEN ET AL) 25 September 1990 (1990-09-25) the whole document -----	1-22

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/JP2004/014444

## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-22

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-22

Pi-conjugated copolymers comprising pyrrole and thiophene units, and a production method thereof  
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2. claims: 23-32

A method for producing solid capacitors  
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# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/JP2004/014444

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4568483	A	04-02-1986	DE 3223544 A1 DE 3366054 D1 EP 0099984 A1 JP 1713344 C JP 3079371 B JP 59018726 A	29-12-1983 16-10-1986 08-02-1984 27-11-1992 18-12-1991 31-01-1984
US 5306443	A	26-04-1994	NONE	
US 4769430	A	06-09-1988	JP 62169820 A DE 3701495 A1	27-07-1987 23-07-1987
EP 0340826	A	08-11-1989	DE 68912820 D1 DE 68912820 T2 EP 0340826 A1 JP 1315416 A JP 2730757 B2 US 5232630 A	17-03-1994 04-08-1994 08-11-1989 20-12-1989 25-03-1998 03-08-1993
US 5093033	A	03-03-1992	DE 3628895 A1 DE 3717669 A1 AT 112883 T AU 603128 B2 AU 7739087 A CA 1336220 C CN 87105806 A ,C DE 3750650 D1 DK 442887 A EP 0257573 A1 ES 2064307 T3 FI 873653 A ,B, IL 83627 A JP 2540166 B2 JP 63066221 A NO 873580 A ,B, PT 85579 A ,B AT 398076 B AT 258987 A	10-03-1988 15-12-1988 15-10-1994 08-11-1990 03-03-1988 04-07-1995 04-05-1988 17-11-1994 27-02-1988 02-03-1988 01-02-1995 27-02-1988 15-12-1991 02-10-1996 24-03-1988 29-02-1988 01-09-1987 26-09-1994 15-01-1994
JP 2098915	A	11-04-1990	JP 2922521 B2	26-07-1999
JP 11292957	A	26-10-1999	NONE	
US 4959430	A	25-09-1990	DE 3813589 A1 DE 3843412 A1 CA 1337950 C DE 58909864 D1 EP 0339340 A2 JP 1313521 A JP 2721700 B2 US 4987042 A US 5035926 A	02-11-1989 28-06-1990 16-01-1996 03-02-2000 02-11-1989 19-12-1989 04-03-1998 22-01-1991 30-07-1991

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